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OUR WISHES FOR '86 AND BEYOND

Around this time of year, we always get to thinking about how the things around us can improve. So we assembled a few of our writers and had them come up with some suggestions on how technology can better serve everyone. We hope that these ideas will someday be followed and we encourage our readers to come up with additional ones, which we'll gladly print.

Uniform long distance rates. With the many advances in modern communications, one end result is quite obvious. It's gotten easier and cheaper to establish contact in all parts of the country, and in most parts of the world. We want to see an end to ripoff long distance rates that charge you more to call one place when it really costs the company about the same to reach anywhere. Why not have uniform rates to *everywhere*, whether it be long distance or local? Technology is making the entire world fit into our backyard—how about granting us some access to it? Many of us phone phreaks have come to look at phone calls in a different way. When you can call *anywhere* you want to, for as long as you want, without worrying about how much it's going to cost you, it all starts to take on new meaning. You begin to realize how offensive it is to be charged for something as basic as talking! Shouldn't we all be able to talk to whoever we want, whenever we want, and for as long as we want? If it were possible (as it someday will be) to have an unlimited amount of people using telephone equipment at the same time without tying it up, wouldn't we be better off with this philosophy? We believe so. The telecommunications giants can still profit handsomely without making communications a luxury.

We're not simply after a free ride; we'd still pay something, though not as much and not as often. We want to see advances in technology shared by all and then perhaps we'll see some of its real potential. Right now, there are many of us that can't afford to call The White House when we want to voice our opinion on something. The ones that can afford it have no problem. And that's the problem here.

The time for change has arrived. After all, how can we call it long distance if it no longer is?

Elimination of charges for touch tones. How the phone companies get away with this is beyond us. When we use touch tones, their equipment works faster and more people are able to make calls. In fact, it is better for their equipment if customers use touch tones. If everybody used touch tones, these companies' profits would soar! Yet we are still charged a monthly fee for using them. There isn't any extra equipment to install. They're not giving you the tones—you're the one who sends them out. In most crossbar and step (even a few ESS) offices, you can use a touchtone phone with no problem even if you're registered as "pulse" with the phone company. The moment you tell them you have a touch tone, you get charged. Most ESS offices have a special device that disables your touch tones unless you pay for them! The only thing your monthly fee pays for is to turn off this device! We think it's time this nonsense was stopped. Shouldn't we be encouraged to use touch tones? Haven't they become almost a necessity, with the growth of services that are touch tone activated, such as

reservation and voice messaging systems? This archaic policy makes it a lot harder—particularly on those who aren't all that wealthy—who are being denied a very basic piece of technology for no earthly reason.

Legislation to protect bulletin boards. A lot more frequently than many of us think, bulletin board systems are seized as evidence of illegal activities. Our own bulletin board in New Jersey was taken this past summer, and they still haven't found anything "illegal" on it. (A hearing scheduled for November 22 was postponed two weeks by the prosecutors, who claim they weren't told about it. The period for forfeiture has expired, which means they cannot keep the equipment as a penalty. The hearing is to decide whether the bulletin board should be returned immediately, since no evidence of wrongdoing has been revealed.)

Bulletin boards must be protected! They are a vital means of communication, a resource that can be used by more people every day. Obviously, this freedom makes some authorities a little nervous. But it's something they're going to have to get over because bulletin boards aren't going away. Neither will they be regulated or registered, as these nervous types demand.

If there is illegal activity occurring, then the people responsible for it should be tracked down. This doesn't mean pulling the plug on the service that enables them to speak. We have to make an effort to define the difference.

At the same time, we hope to see an improvement in the quality of bulletin boards everywhere. Nothing is more boring and useless than a board that lists credit card numbers and Sprint codes. What is the point? They either go bad within a day or are monitored closely. Boards that discuss *how* things are done and answer the questions, simple or complex, that we all have are the boards we're fighting for. Let's see some more of these.

Some reasonable prices on "public" services. Compuserve, Source, Dow Jones, are you listening? Is it any wonder you're constantly being ripped off with the outrageous prices you charge? A session on one of these services can be a nightmare, as every second costs you, every mistake is money out the window. Come on already, times have changed. Enough with the surcharges and access fees—provide affordable services for people or go join the dinosaurs.

Access to what is being said about us. One of the most frustrating things is to have to pay to see what URW is telling people about you. Any wonder why people break in? Shouldn't it be just as easy for us to see our credit record as it is for some schmuck at Sears?

While we're on the subject, how far are we going to let these people go with our credit history? Is it fair to be denied credit because you paid a bill late four years ago? Or because you were tried for a crime and the charges were dropped? Is it fair for companies to analyze your buying tendencies and theorize as to what type of person you are, and to use *that* as a deciding factor?

We feel it's only fair that we be shown, perhaps on an annual basis, what is being said about us and given the opportunity to

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Fun With COSMOS

by Lex Luther and The Legion of Doom/Hackers

COSMOS (COmputerized System for Mainframe Operations), the "telephone company computer," is a wire center administration system for subscriber services. Put another way—an inter-office memo sender. Its primary objectives are: 1) to relieve the problems of congestion and long cross connection on the Main Distributing Frame (MDF); 2) to improve entity load balance and customer line equipment distribution across the Wire Centers' switching equipment; and 3) to provide an accurate and readily accessible database for use by all AT&T departments. There is usually one COSMOS system for every area code.

You cannot enter someone's name and get their phone number through COSMOS. What it's primarily used for is to assign central office equipment to cable pairs and telephone numbers. It maintains records of all relevant facilities including subscriber cable and office equipment, process service and work orders, and it produces bulk assignments for office additions and rearrangements. In short, it automates the frame in your central office.

COSMOS prints lists at the beginning of each day, specifying what numbers to connect and disconnect.

Hacking Accounts

Most COSMOS systems run on either a PDP 11/45 or 11/70 made by DEC, and can usually handle up to 96 terminals which are either hard-wired, or remotely dialed into the system. If you don't know your local COSMOS dial-up or don't have an account, you can probably get one out of your red beard, fringe, or switch. They all should have the dial-up, password, and Wire Center in your area.

Typical COSMOS accounts are: MF02, PA52, DPC6, etc. Those 2 letter prefixes in the beginning of the account stand for: PA—Loop Assignment Center, DA—Network Admin Center, RS—Repair Service, MF—Frame and Toll, FC—Frame Control Center, GA—General Inquiries, DC—Data Conversion, NT—NTec, DP—DistPatch, CI—CIC.

The more important accounts which are used for service order entry are, in order of importance: ROOF, SYS, DIN, PRG0P, and COSMOS.

COSMOS is the account that the test board uses, and is now mainly found on the older versions of the COSNIX operating system. Typical COSMOS passwords are: WEFEST, MILK48, RINGIT.

Some accounts don't have passwords, but this is rare. Sometimes all you need is the dial-up to get in. Whoever was last on forgot to hit CTRL-Y to log off, and just hung up, so when you call, you get the WC% sitting there!

Transaction Codes

Once you log in you should get the prompt of WC% where WC is the Wire Center and % indicates that the system is on-line. From that prompt, you can type certain commands that will enable you to do different things. The ISH or INQ commands (inquire about a circuit) will print out information about the number you specify. From the prompt, type ISH or INQ, then a carriage return. You will then have to type an H which means HUNT then TN which is the Telephone Number 935-2481 and the system will print an underscore. You then type a period as illustrated (what you type is in bold).

```
WC% ISH
H TN 935-2481
```

```
TN 935-2481
```

```
ST WK PD DATE 07-16-78 TYPE H
**ORD F24030161451 DD 01-20-84 FDD 01-20-84
OE 003-601-400
ST WK PD DATE 07-16-78 CS IFR US IFR FEA RNNL
**ORD F24030161451 DD 01-20-84 FDD 01-20-84
LOC WC1014 LOC W13-03L14/4-04
CP 45-1262
ST WK PD DATE 11-02-82
**ORD F24030161451 DD 01-20-84 FDD 01-20-84
LOC WC1010 LOC W10-06L01/12/12
```

```
HUNT SEQUENCE FOR TN 935-2481
TN 935-2482 TN 935-2484
```

```
** ISH COMPLETED 09-24-84
```

```
WC%
```

Here is an explanation of what was printed out about the number 935-2481: Line 1: TN 935-2481—the Telephone number that you inquired about. Line 2: ST WK PD DATE 07-16-78 TYPE H—ST means Status, WK PD is the Work Period, the date following is when the TN 935-2481 was first installed, and TYPE (sometimes abbreviated as TT) is the Telephone number type, where B is a POT's (personal number) with hunting. Hunting means that when the number 935-2481 is busy, the call will be forwarded automatically to the next

number until it finds an idle line. The TT TYPE could be any one of the following: B—POT's hunting; C—Coin; G—Complex services, e.g., Direct Inward Dialing, Radio Cinnamon Carrier, etc.; O—Official (company); Q—Centrex, WATS, Jarge PBX's; X—POT's non-hunting. Line 3: **ORD F24030161451 DD 01-20-84 FDD 01-20-84—ORD stands for service or work ORDER which has a maximum of 20 alphanumeric characters. DD is the Due Date, and FDD is the Frame Due Date, which I assume is the last time the line was worked on. Line 4: OE 003-601-400—OE stands for Operating Exchange which in this case is a RIFSS. By seeing what format the OE is, you can tell what type of central office the number is served by. Line 5: ST WK PD DATE 07-16-78 CS IFR US IFR FEA RNNL—ST, WK, PD were all explained in LINE 2. CS is the Customer Class of Service, IFR stands for Flat Rate, IS is the USOC (Uniform Service Order Code) which are identification codes used on Service Orders and Equipment records to identify items of service or equipment. Each code consists of 3 or 5 characters, each one being either a letter or a number. FEA RNNL stands for Customer Features: R—Rotary; N—Non-steeve; and L—Loop method. The typical type of line is Loop started, a ground start is used on PBX's and such. Line 6 is a repeat of Line 3. Line 7: LOC WC1014 LOC W13-03L14/4-04—LOC is the LOCATION. Line 8: CP 45-1262—CP is the Cable Pair#s. 1262. Lines 9-11 have been previously explained. Line 12: HUNT SEQUENCE FOR TN 935-2481 TN 935-2482 TN 935-2484—As explained earlier, when 935-2481 is busy, it will HUNT to 935-2482. If that is busy, it will go to 2483 and so on.

You can also inquire upon the Cable Pair, by:
WC% ISH
H CP 45-1262

The information printed will be similar to what was printed about the TN, Paths, Files, and Directories.

If you have a semi-privileged account, type I.S.* to see what files you have access to. You will probably see something similar to:

```
/BIN: /ETC: /USR:
CP COSNIX BIN
DATE INIT COSMOS
ECHO LINES PRG0P
LCASE: PASSWD SQ
MOTD SYSDEN SYS
STAT UDS TMP
```

To run a program, process just type the filename at the WC% prompt. If you want to view a file in a directory—in this case we will use the /BIN directory—you would type:

```
WC% CD /BIN
```

You first connect to the directory, then to print the file MOTD which stands for Message Of The Day, type:

```
WC% PR /MOTD
```

```
FRI APR 10 0941:37:16 MOTD PAGE 1
```

```
ATTN: ALL USERS
MAKE SURE YOU LOG OUT PROPERLY
THANK YOU
```

Some files may have an "I" appended to the end of them on the older versions of COSNIX. Those files should be text files and you should have no problem printing them. Other files may be encrypted.

If you do not know what directory a file you are looking for is in use the FIND (file-name) command. As shown below, PERMIT is what we are looking for:

```
WC% FIND PERMIT
```

```
/DEV/PERMIT
```

You can either connect to the /DEV directory then PRint the file or type:

```
WC% PR /DEV/PERMIT
```

The most looked up file would probably be the PASSWD file.

```
WC% CAT /ETC/PASSWD
```

```
ROOT:YXMDIMME:;
SY:SYNOBIMX:;USR:SYS:
BIN:IMZAKZE:;BIN:
PREO:8:;USR:PRG0P:
COSMOS:FORVMD:9:;USR:TMP:;BIN:PERMIT
PAGE:2581MET:40:;USR:TMP:;BIN:PERMIT
```

99 times out of 100 the passwords will be encrypted. Notice that there are 2 colons after the PRG0P account. This means that there is no password, so after entering PRG0P at the LOGIN, it will jump to WC% If a valid WC is entered, you will get in. The way COSMOS checks to see if the password is valid is: after you enter your account, and password, the system encrypts the password you just typed, and compares it to the encrypted password in the PASSWD file. If it is correct, you will be in—if not, INVALID LOGIN.



Telco Service Spawns Racist Banter

By Gary H. Smith

Anyone who wants to know what Hudson County youth are thinking need only pick up the phone any hour of the day or night. But what comes out of the receiver may prove disappointing.

A group-access service that the state Board of Public Utilities recently approved for a six-month trial has been billed by the phone company as providing an opportunity for young and old to share conversation and advice. Instead it has generated the audio equivalent of graffiti in a public toilet—raunchy, simple-minded come-ons and jokes. The ten-person conference calls also have provided an unusual forum for open racial conflict.

"Any [blacks] on this line?" a young female voice asked one afternoon on the line billed as "Talk Exchange." "Better get off—this is a white line."

If the current talk on the phone lines is any indication, New Jersey Bell stands to make a tidy sum from the trial, at least until its six months are up.

French Phones Renumbered

The New York Times

French phone service, once notorious for its inefficiency, was seized by a technological revolution on October 25. A flick of the switch and—voilà!—all 24 million numbers had eight digits and no area codes.

About 22,000 technicians mobilized for the changeover at 11 P.M. That was the time of the week, researchers concluded, at which the French made the fewest telephone calls.

"The world is watching us," said Louis Mexandeu, minister for the Post and Telecommunications Authority. "It is the biggest such operation ever conducted."

The old numbering system, created in 1955 for two million subscribers, had reached the saturation point, the telephone authority said. The conversion to eight digits will give the service about 50 million lines.

In Paris, the new eight-digit numbers are created by preceding existing numbers with the figure "4." In the provinces, area codes have been incorporated into existing numbers.

BB Watching Without Regulation

The New York Times

The Government's ability to keep track of people has become much more effective in the last two decades, but "the law has not kept pace with these changes," according to a nonpartisan Congressional research agency.

In a report on electronic surveillance and civil liberties, the Office of Technology said it had identified 85 separate computerized record systems used for law-enforcement, investigative and intelligence purposes, with a total of 288 million records concerning 114 million people.

For security reasons, the Office of Technology did not request any information from the Central Intelligence Agency and the National Security Agency, the two Federal agencies believed to be most heavily engaged in electronic and other kinds of surveillance on a worldwide basis.

The report said there had been "a virtual revolution in the technology relevant to electronic surveillance" in the last 20 years, citing "advances in electronics, semiconductors, computers, imaging, databases, and related technologies."

For example, the report said, a helicopter flying at 6,000 feet can track over a 250-mile radius the radio signals sent by a small

electronic beeper attached to a car.

The Technology Office said that its review of existing statutes and court opinions found that the law "does not adequately cover new and emerging electronic surveillance technologies."

Fawcett Phone Bill Too Big

New York Post

Farrah Fawcett has a big phone bill—and it isn't because she's calling long distance. A man suspected of stealing the code to the actress' car phone has been charged in a related case. Michael Shaw of Culver City allegedly stole an unidentified party's code and billed to them about \$13,000 of calls made from his Mercedes. The victim named in the criminal complaint was Common Carrier Communications, the Santa Ana, California company that provided the mobile phone service, according to a deputy District Attorney, who alleged that Shaw also stole Fawcett's phone code.

Inmates Handle Information Calls

The New York Times

The Department of Motor Vehicles has announced that it will use prison inmates to handle telephone calls for information from people in the New York City area. Eventually, as many as 100 inmates from the Bayview prison for women will be participating. The women are to be paid 50 cents an hour.

No More Redialing?

USA Today

The Federal Communications Commission ruled on November 4th that automatic redial buttons on telephones cannot call the same number more than 15 times in a row.

It seems we keep jamming telephone lines during radio phone-in contests and power blackouts. When Bruce Springsteen tickets went on sale in Washington in July, the phone system was garbled for hours. That forced callers to wait to get through to other numbers.

The FCC blames redial, saying it lets us buzz the same number hundreds of times with little effort.

The rule also covers computer redials—but it won't affect existing equipment. The FCC is asking for public comment by January 10th on regulating computer redials. [Regulated phreaking, what will they think of next?]

Cityphone Has The Answer

McGraw-Hill, Inc.

It's the ultimate in trivial pursuit. Where can a New Yorker rent a penguin for a day? Where do you go to have bagels bronzed?

For 15 years now, operators at Cityphone, a division of the New York Yellow Pages, have been answering questions ranging from the ordinary to the outrageous. The New York Yellow Pages, commonly known as the "Bluebooks", is the brainchild of Eugene Gottesman, an entrepreneur who realized that as the Bell System's Yellow Pages became too burdensome for easy use, his Bluebooks could combine neighborhood and city listings in one lightweight volume. He started Cityphone to hype Bluebook advertisers, but over the years it has become a sort of investigative hotline.

"If it exists, we find it," said an operator. "Sometimes the search can last for days, even years. We never give up. Cityphone is open during business hours at 2126750900."

SURVEY RESULTS

The survey results are in and here they are: 42.4% of the cards were returned. An average of 2,20755 people per subscriber are reported to read 2600. 85.5% say they are satisfied, 9.0% say they are not. Reasons for reading (more than one choice was allowed): 53.3% - personal, 46.7% - hobby, 33.0% - business, 5.1% - security agency, 9.0% - industry, 25.0% - phreaker, 28.7% - hacker, 8.0% - other. 12.2% of the respondents considered themselves a phreaker; 12.7%, a hacker; 12.1%, both; and 55.2%, neither a phreaker nor a hacker. 44.3% said we improved, 8.0% said we did not improve. Finally, 50.4% said that they would contribute to 2600 in some way.

Dear Readers: We are quite willing to admit that most of the responses to our reader survey were complimentary. Many of you provided us with useful criticism. We hope you do not find any more problems with the punching of the holes. We have taken new steps to ensure that the holes meet industry standards. Since we got so many positive responses, we were forced to print a larger proportion of the negative responses. Then again, quite a few of the negative responses read like this: "I am not satisfied because you are not weekly" or "no 10 pages," etc. Well, at least this month we are 10 pages.

New York, NY—Exclusive information. Keep it up. My least favorite part is that there are no dates on news items, nor datelines.

Raleigh, NC—Too much "fluff" news. Too much telephone blue boxing info. I think you perform a "public service" by exposing ways to hack into computer systems. The companies will not give users this information. A magazine like 2600 may "wake up" some readers and computer users. Much of your technical information is not accurate. For instance, the 10/85 article on VMS did not mention version 4.0 security features which radically altered VMS and made your article obsolete. Also there is no such privilege in VMS as "system manager".

Kilmer Facility, NJ—It's the perfect complement to Private Sector BBS (when it's online, that is) (even better when it's offline "high").

Salinas, CA—Taking up valuable room with stupid 2600 "Flash" news briefs, same Joe "Systematically Speaking". These articles are of amazing interest only nothing that great. Like to see a beginners' series such as the basic terms definitions and a tutorial on how to get started hacking and phreaking.

Philadelphia, PA—Keep your scope broad and always include news items and commentary; all of those who read my copy are interested in maintaining security and laughing at phone companies.

Charleston, SC—Would like to see special pricing on all back issues as a package. What happened to TAP? And why a different P.O. box for this card? As of this month, back issues will be available at a special rate of \$20 per volume (all of 1984 or 1985).

TAP is gone. We have not seen a new copy for well over a year. We have heard various rumors about TAP, incidentally (and for the benefit of those who haven't heard to say this a dozen times before), we are not TAP.

Finally, the different P.O. box was used to receive the survey cards, so we would not clog the other box up. We even have other boxes for other purposes, but we don't want to bore you with the details.

Phoenix, AZ—I like your rag a lot.

Smithtown, NY—I think it's a great magazine. Please try to give out numbers of really good BBS's. Also include more schematics.

Westchester, NY—Try to avoid trouble! I value your info very much! Why should any person be dumb to the ways of the world?

Western Nassau GMF, NY—How about some phreak basis? A small column on this from month to month would be pretty cool. I know some hackers; no real phreaks. When wacko Jersey DAs are talking about "moving satellites" and the "surreal press" is talking about tank parts or launching nukes, it's good to know there are still more places like 2600 to go to to find out the truth.

Fort Smith, AR—Favorite contributions by hackers & phreakers. Least: fillers. Keep up the excellent work.

Kansas City, MO—I would like to see more technical articles on the phone system and how about explosives? You showed some real guts publishing the blue box plans and although it is much more difficult how do they work. Publish the results of this survey. Publish financial report on 2600.

We do not like explosives. There is a plethora of magazines that will abuse them or look in the Amateur's Cookbook, or you could use gasoline and a match or perhaps an axe.

Washington, DC—Any information on phones is valuable and hard to get but you never provide background, explanations, or words for acronyms. Define terms, give references. Your recent letter about ripping off universities was extremely offensive. Stop filling space with AT&T ads.

San Francisco, CA—Put in more How To phone info—actual teko codes. Also how to use Blue, Black, Green, etc. boxes—that is why I subscribed—to get such information.

Honolulu, HI—Far away most valuable information available for these phones.

Denver, CO—Please continue covering as much teko electronics as you can get a hold on. Also very much appreciated are the suggested reading materials—more suggestions would be highly valued. Also would like lists of other such publications running along the same lines as 2600. Finally any such info on international systems, such as U.K., Italy, Australia, or Japan would be invaluable. The more of the above I see the more I will be motivated to contribute.

U.S. Postal Service, MI—Would like to see more first person accounts and interviews.

No would we.

Staten Island, NY—How about a 2600 BBS Network? (one step closer to Exxon's size...) Where's the 2600 phonebook? Topics: BBS's that cater to hackers, phreaks, Arpanet in detail, do all Bioc's tutorials in series, trashing spots (have readers send these in).

Pittsburgh, PA—I have been known to do some risky things, but not anymore. would like to see more info on risk free pastimes, especially 800 numbers. Maybe a section to post BBS numbers.

Please send us lists of BBS numbers or a brief review of your favorite BBS.

Western Nassau GMF, NY—Good luck fighting the system. Keep up your exposés of the communication companies.

Smithtown, NY—Like the short clips and letters; dislike the long, technical articles geared toward small elite of specialists. Topics: hacking laws; where are the limits?

Birmingham, AL—Too much space devoted to news clippings—but keep them, just reduce print size.

No Postmark—Since it seems that TAP has gone the way of the dinosaurs, perhaps you could fill in some of the areas of subject matter that they covered. Perhaps occasional interviews with phreakers/hackers/sysops or a short review of a good BBS. Perhaps something with the 414 wizard about being busted or bootlegger.

Denver, CO—Too much space is devoted to computers. The price has increased—I guess that's an improvement for you. I probably won't renew.

The price only increased from \$10 to \$12 per year back on March 1st. Back is no prices did increase, but this should not affect your renewal. Are you just trying to depress us?

Houston, TX—Fills a void in the phreaking world.

No Postmark—Least favorite part is the articles on operating systems; Most: crime and intrigue?

No Postmark—Include more definitions, explanatory material. I hope you can keep 2600 going. It's got a lot of interesting stuff, and it's nicely produced.

New Orleans, LA—At least you're trying. Please tell me how the Dutch TV pirates built their wireless TV transmitters for \$20 (as stated in an issue this year). It is vital to free speech in the US that we build one and use it. I love your mag, but you should do follow-ups on earlier stories.

We do not know any more about these pirates. Readers? Perhaps you can answer this one?

Van Nuys, CA—Not satisfied, it's not TAP. Topics: anything dastardly, home built II-bombs, etc.

Prince Georges, MD—Sometimes writing is childish. Less sensationalism. Too much "we, they." Challenge readers more.

Salt Lake City, UT—Favorite part is the tech articles. Least Favorite part is system trashing examples. How about a separate page of classified ads from readers wanting to buy/sell modems, tech, manuals, etc.

No Mark—Need better balance for new readers who are not sure what is going on.

Baltimore, MD—Usually good information; least favorite part is the lack of maturity (unsigned articles, etc.) Improve: have all articles signed; be responsible.

Unfortunately, in this world, where data is stored here and there, where databases are crossmatched, where the government opens a "file" on the suspicious, where the FBI delights in punishing you for by sending them to bed without their computer, our writers have an understandable right to withhold information like this. 2600 is primarily in the business of providing information. A byline is not nearly as important as anyone at the article itself.

San Jose (out postmark)—It's difficult for some of us who are not already familiar with, say, a computer system to get much out of an article which debates directly and deeply on a particular subject. For instance, there was a recent article on some DEC system, starting off with how you get into it and what you can do. It would have been of benefit to the uninitiated to have an opening paragraph describing uses and users of such a system, and how the information in the article can be of any use to the hacker or casual experimenter. In general, though a good publication, I look forward to each issue. Hope you get your BBS back up; I'd like to access it if I could figure out how.

Raleigh, NC—Could have more technical content, better articles concerning theory of operation, and new updated systems i.e. ESS, DMS, etc.

Rolla, MO—Interesting articles, knowledgeable, not over awed by technology (as are regular news people).

That's what we're all about.

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The 2600 Information Bureau

HERE IS AN EXTENSIVE LIST OF OVER 1500 BULLETIN BOARD NUMBERS. IF YOU HAVE SOME TO ADD OR FIND SOME OF THESE THAT DON'T WORK, TELL US! WRITE TO 2600 INFORMATION BUREAU, BOX 99, MIDDLE ISLAND, NY 11951. PLEASE TRY TO INCLUDE BBS NAME, SUBJECT MATTER, BAUD RATE(S), FEES, OR OPERATING HOURS.

011-441-389-2136	205-522-1340	210-607-5306	301-460-0578	303-340-8717	313-674-6703	319-234-1370	406-297-6146	415-866-2811
011-444-462-839189	205-546-6239	210-570-6389	301-465-1176	303-341-4071	313-674-9348	319-317-7648	409-265-5296	415-891-2662
011-67-20-172515	205-641-6265	210-591-2503	301-484-7871	303-352-1983	313-729-2101	319-316-7750	409-344-5095	415-874-8526
201-236-0541	205-643-0909	210-545-2146	301-500-9106	303-353-3380	313-773-3306	319-343-1314	409-445-1019	415-865-0669
201-228-7817	205-720-2452	210-577-9947	301-565-9031	303-358-2821	313-748-1764	319-344-0871	409-449-2554	415-897-5756
201-249-0691	205-725-9111	210-594-4574	301-587-7172	303-371-9523	313-769-0499	319-346-5165	417-963-0269	415-895-9940
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516-185-9116	516-924-4692	515-467-6889	703-621-5079	713-553-0001	714-874-0964	813-489-0806	914-671-7167
516-470-0641	516-924-8115	516-538-1041	703-665-0646	713-543-0403	714-729-1389	813-511-2276	914-683-1393
516-472-5693	516-928-6667	516-691-2648	703-667-7988	713-543-1267	714-741-4965	813-665-9945	914-695-4155
516-471-3171	516-929-3752	516-791-2109	703-670-5881	713-625-8254	714-958-2063	813-675-8096	914-694-1268
516-472-1428	516-931-7940	516-897-8628	703-671-0768	713-644-6401	714-971-1885	813-684-1568	914-654-8785
516-473-2642	516-937-6976	516-947-1296	703-680-5231	713-645-5305	714-973-3853	813-685-4187	914-656-4647
516-473-7507	516-937-7613	517-123-5082	703-674-1347	713-660-9252	714-974-2710	813-687-1994	914-648-1694
516-474-6879	516-938-6051	517-268-7299	703-750-3842	713-661-2768	714-975-4113	813-692-1806	914-670-6579
516-474-7693	516-944-7116	517-334-6369	703-759-8049	713-667-4767	714-977-7670	813-693-7670	914-691-8774
516-467-9552	516-944-5262	517-357-7538	703-759-6627	713-691-4919	714-941-3755	814-738-4837	914-758-8771
516-467-1782	516-944-6794	517-357-9512	703-765-2181	713-699-3073	714-942-3874	814-737-5567	914-782-7600
516-471-1005	516-946-6212	517-440-4737	703-831-7355	713-721-0368	714-952-1529	815-455-2040	914-783-4010
516-473-5439	516-949-6090	517-470-2548	703-831-6394	713-723-6481	714-994-6680	815-633-6353	914-815-2667
516-473-8766	516-981-0309	517-478-6642	703-879-6627	713-741-4919	714-941-3755	815-654-5272	914-815-5827
516-473-6467	516-981-1002	517-481-7147	703-879-8751	713-742-4106	714-957-3567	815-678-1020	914-818-1302
516-482-4491	517-519-1367	517-528-9049	703-879-8921	713-729-1257	714-958-2660	815-877-6121	914-942-2638
516-484-8444	518-546-7396	517-536-4670	703-898-7625	713-729-9902	714-927-9874	816-443-2576	914-948-2018
516-486-6494	518-570-6543	517-577-8092	704-102-5459	713-797-1212	714-979-0377	816-613-0704	915-566-9903
516-487-7816	518-593-2667	517-632-1862	704-105-4111	713-772-5259	714-646-2985	816-597-9541	915-598-1668
516-491-4877	501-264-2361	517-646-7416	704-177-7956	713-772-5409	714-699-0861	816-911-8216	915-725-1000
516-497-5475	502-546-1472	517-663-2119	704-527-3257	713-777-6096	714-727-4298	817-244-4151	916-395-4459
516-498-2534	502-347-6014	517-692-5971	704-515-6944	713-794-4483	714-767-9881	817-294-7253	916-493-8718
516-498-4877	502-175-6444	517-720-5400	704-673-5140	713-776-8243	714-776-3266	817-361-0686	916-436-1263
516-498-6721	502-122-5577	517-721-1648	707-257-6562	713-778-0156	714-803-1195	817-467-1612	916-446-5219
516-498-6735	507-574-0737	517-769-0851	707-422-4767	713-790-2586	714-805-3019	817-467-5110	916-493-2177
516-516-2093	507-736-7513	517-821-0649	707-422-2256	713-811-3798	714-849-2422	817-547-6090	916-464-8777
516-516-7756	507-747-5187	517-829-4878	707-427-3916	713-829-2750	714-904-5573	817-640-1282	916-768-0059
516-511-9909	507-840-4721	517-836-4096	707-536-9124	713-859-4649	801-224-2048	817-717-4640	916-795-0718
516-543-7621	502-898-4977	517-868-8261	707-725-9312	713-870-8803	801-255-4796	817-717-8781	916-838-8948
516-549-6698	502-938-4368	517-875-7906	707-725-9642	713-880-0510	801-261-1306	817-728-3693	916-725-1666
516-561-6580	502-952-1182	517-882-0781	707-745-9052	713-897-0824	801-264-8021	817-724-1268	916-762-0676
516-561-8267	502-952-2018	517-874-4325	707-874-4781	713-895-8111	801-266-8365	817-767-5847	916-493-6801
516-569-0589	502-952-2146	517-881-1128	707-884-4221	713-933-7352	801-268-8831	818-362-9276	916-723-5275
516-571-2046	502-956-5031	517-882-6495	707-944-8002	713-937-6778	801-277-9630	818-363-0996	916-756-2169
516-571-8858	502-957-4438	517-883-8430	707-966-3027	713-94			

SYSTEMATICALLY SPEAKING

Super Crisis Alert System

United Press International

An emergency warning system that would ring telephones in homes of residents threatened by chemical spills or dangerous weather could be in place in New Jersey within a few years.

The system, now being studied by state emergency officials, could ring up to 100 phones in affected areas simultaneously. It could shift from area to area within minutes.

"When someone picks up the phone, a recording would provide information on evacuation procedures, shelters, or other important information," said a member of the state police emergency management team. "A drawback to the system may be that it would overload the phone system," he said.

Another system under study would automatically increase the volume of radios in affected areas. Currently, the state relies on an emergency broadcast system, which sets off municipal sirens and alarms and triggers emergency broadcast tones on radios.

Super Pay Phone

Communications Week

Advanced TeleSystems Ltd. introduced what it claims is the country's first coin and credit card-operated pay phone.

The modularly designed, stand-alone Marenm XI phone can be programmed to internally verify any number of credit cards, and it will accept mixed payment of both coins and credit cards. An option to use the phones' external credit card validation capability to replace point-of-sale verification devices is in the works.

The phone requires a 40-cent surcharge over AT&T's Direct Distance Dialing rates for credit card calls and features least-cost routing.

The phones rely on electronic, optical, and magnetic switches, including a magnetic switchhook without a button and infrared optical reading of the keypad. A 300-word vocabulary voice prompting system reads the keypad numbers as they are pressed and tells incoming callers that it will not accept collect calls. The call-prompting feature can be customized for individual customers allowing companies to add messages (such as "Thank you for subscribing to 2600," for example.)

The phones have only a \$150 coin box to reduce the incentive for vandalism. The phones also use ATS' new paperless coin-box accounting system, which uses a hand-held computer to fight coin-collector fraud.

Phones at High and Low Speeds

Communications Week

Airfone Inc., which provides phone service on major airlines, will begin public telephone service on Amtrak's Washington-to-New York Metroliner in late January.

There would be three phones on each train. Amtrak has converted a railroad car dressing room into an office with desks and phones, but there will also be standard telephone booths.

Calls will be made by sliding any major credit card through a reader on the phone. Once the card is validated, calls can be dialed directly to any location in the U.S., including Alaska, Hawaii, and Puerto Rico.

There were phones on the Metroliner until 1981 when the U.S. government, which lent the radio frequency used for the service to AT&T, asked for its return for government use.

Meanwhile, NewVector Communications said it is testing

credit card cellular mobile phones on the Metro Transit Public Bus System and the Washington State Ferry System in Seattle.

AT&T Offers E-Mail

Communications Week

AT&T Information Systems and AT&T Communications have joined together to offer an electronic mail service which will resemble MCI Mail, but will be priced slightly lower. For instance, the sign-up fee is said to be \$12, compared with MCI's \$18 charge. Delivery of a 400-character memo would be 40 cents and an electronic letter would be 80 cents. Also, AT&T Mail would feature \$1.25 cash-on-delivery option [collect electronic mail?] and an interactive chat mode, priced at 45 cents per minute of connect time. AT&T will reportedly charge a half-cent per day for storage of each message and will charge an extra 40 cents for a letter written while connected to the system.

Dreams of GENie

Communications Week

General Electric Information Services announced a new database services network for home personal computer users called GENie, or General Electric Network Information Exchange. It is an addition to GEISCO's traditional corporate customer base. The service will primarily use excess nighttime capacity on GEISCO's packet-switched network.

It will cost only \$5 per hour for either 300 or 1200 baud service. This is considerably less than CompuServe and the Source, which charge up to 60 percent more per hour, and carry a surcharge for 1200 baud.

GENie services include electronic mail, bulletin board, Business Band Real-Time conferencing, a CB-like service adapted for business use and said by the company to be unique to GENie. GEISCO intends to add online shopping and travel services in 1986 and then additional newsletters and services after that.

Subscribers can sign up using their home computer by calling 8006388369, then entering "H,I,H," then "5" and then "5.MI.1993.GENIE."

German Phone System Stagnant

Wall Street Journal

How does one begin to come to terms with the West German Post Ministry, which wields a communications monopoly so rigid it once barred the Mickey Mouse telephone?

In this era of telecommunications liberalization around the world, the ministry—which controls virtually all forms of transmitted communication in the country and annually doles out \$6 billion in contracts—remains, in the view of many, an ancient anomaly.

Ever since the first Bell telephones arrived in Berlin a century ago under the watchful eye of Postmaster Heinrich von Stephan, the telecommunications industry has been carefully regulated by government. At first, both the phone and the rules were simple. Today, a huge bureaucracy (some 540,000 employees) follows a maze of regulations, some of which date back to the 1920s and 1930s, in dealing with a rapidly changing technology.

[By the way, the Mickey Mouse phones were barred because designer phones were unable to withstand being dropped from a height of one meter, one of the many requirements.]

Survey

(continued from page 2-44)

Oakland, CA—Would like more technical articles.
Somewhere in Canada—Although very satisfied would like to see more on our own networks and personal tales. Info bureau: sometimes weak explanations, other times irrelevant filler.
Orlando, FL—Lead article usually good. Flash is so so.
Omaha, NE—Favorite part is the cover articles. Least favorite part is excess of advertisements.
Baton Rouge, LA—I like all of it!
Los Angeles, CA—High tech and informative. A rare breed of journalism seem to become extinct.
Why exist? As time passes by, the staff of 2600 will undoubtedly breed more journalists. Also as time passes, technology developments will open new frontiers. In the 60's there was only the world of arifiphony. Now there is a crazy telephone world as well as a computer world. Why know what the future brings.
(Illegible)—Least favorite part is "Dear 2600". Most favorite part is info on phone systems.
(Cut off)—At this low cost articles are excellent. Most favorite part is information bureau. Least favorite: 2600 Flash.
If we lowered the price would you like the removal of articles better?
Sacramento, CA—Not enough information on "how to." I like the mail section, dislike some of the news articles (the ones that are just trivia; no info)
Omaha, NE—Have enjoyed reading the publication if for only a short time. Have found it very informative. Hope the articles and good work continue. This is one of the few ways the real information can reach interested parties.
San Jose, CA—Excellent attempts at accuracy.
Attempts?
Oakland, CA—Favorite part is news clips, least favorite part is biased reporting
Marina Del Rey, CA—I thought the mag would talk more about computers rather than telephones.
Kansas City, MO—It's good "state" material for system security professionals.
Roanoke, VA—Good from the start. Glad [you] don't do drug articles like TAP (waste of space)—improve by covering more diverse techniques. Put out call for papers.
Salt Lake City, UT—Prefer more computer hacking info, less phone phreak info. More mainframe access numbers and passwords.
We never publish passwords, unless they are non-functional or default passwords.
Northern Virginia, VA—for the price it's not bad but for myself I'm more into just phones instead of hacking.
Denver, CO—Would like to see some working red and blue plans printed, more of them. Like to see auditory manuscripts of any type on weapons, communications, and computer banks.
Hicksville, NY—Your articles have gone down, while news bits or other bits have gone up. The articles are much more interesting.
Chicago, IL—Can improve: yes, make it bigger.
Trenton, NJ—Still too technical.
Lancaster, CA—I would like to see more information on phreaking, both techniques and hardware. I read 2600 for the sheer ecstasy of knowing what makes "the system" work.
And there you have it. Some of you do not like our News/Flash column, then again about the same amount of you think it is the best part of 2600. Some of you say it is too technical, and then some say it is not technical enough. Some of you say that there is too much computer emphasis, and some say that there is too much discussion of telephony. At least we know that most of you want to see more articles covering the basics of phreaking and hacking, something which we will devote more space to in 1988. Many of you also like the letters section, which, unfortunately, has been neglected with this section this month.
If you want us to print secret government documents, then someone has to send us secret government documents. If you like the letters column, then write informative letters to us. The same goes for features and articles and stories and data. We have many good writers. But we want more.
Happy New Year.

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OUR WISHES

(continued from page 2-)

correct any errors, or at least to question or explain them. We shouldn't have to pay a penny for this "privilege".

An end to information charges. Again we're at a loss to explain why the phone companies charge for something that encourages using their service. If we have to pay sixty cents to find out what someone's phone number is in another state, and then pay for a phone call as well, we're sure as hell going to think twice about making the call in the first place! While it's true that some people would use an alternate service to make the call, the losses to AT&T can't be that stupendous. We feel that this is an unjustifiable charge, one that hurts everyone in the end.

Our suggestions include: providing one call to information (at least) for every long distance call dialed; providing free phone books (originally, charges for information were to encourage people to use the phone books instead); alternate information services for alternate carriers, i.e. a subscriber to Skyline would have the advantage of free access to Skyline information; or an online database where you can find out as many numbers or cross-references as you like via modem. We'd like to hear more suggestions and we hope they get to the right people.

Nationwide access for all. If there are databases that are so big and extensive that anyone can check our credit history from anywhere in the country, what is stopping us from using our bank card in New York to withdraw money while we are in Los Angeles? When will these systems be integrated so we can all benefit from technology? There is already statewide connection of auto teller banking, and some limited interstate use, but when will a national network be set up?